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## FEATURES OF MODERN EXPERT RESEARCHES OF PERFUMERY PRODUCTS

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**Abstract.** The article highlights the expert researches features of perfumery products. The main research methods in accordance with national standards and international normative documents are determined. The main provisions of the quality assessment, marking and packaging of perfumery products are analyzed with the purpose of their expertise methodology updating in accordance with modern requirements of regulatory documentation. The comparative characteristic of technical requirements of international standards to the quality of perfumery products and technical requirements of national standards is given. According to the results of imported and domestic perfumery products range comparing, it has been established that the main difference between them lies in the perfumery composition content and the qualification of perfume smell's stability. It has been established that the main factors in the perfumery goods quality formation are raw materials, the quantitative and qualitative product's composition, the specifics of its production (consistency, packaging nature, type of consumer packaging, capacity of product unit). An assessment of perfumery products quality was conducted for determine their conformity with a modern regulatory documents on the main sensory, physical and chemical quality indicators, and also assessment of packaging conformity in which the perfume liquors are packed, marking and packaging according to the methods, which are given in the European regulatory documents. The authors proposed an algorithm for carrying out the main stage of commodity examination of perfumery products quality for compliance the current requirements of international standards, regulations and directives and regulatory and technical requirements of national standards, which in further developments can be the basis for a modern method of perfumery products expertise.

**Keywords:** expert researches; perfumery products; quality indices; technical requirements; marking; international standards.

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## ОСОБЛИВОСТІ СУЧАСНИХ ЕКСПЕРТНИХ ДОСЛІДЖЕНЬ ПАРФУМЕРНИХ ТОВАРІВ

Захарчук, В. Г., Неруца, Л. В. Особливості сучасних експертних досліджень парфумерних товарів // Вісник соціально-економічних досліджень : зб. наук. праць (ISSN 2313-4569); за ред. : М. І. Зверякова (голов. ред.) та ін. Одеса : Одеський національний економічний університет. 2018. № 4 (68). С. 9–18.

**Анотація.** У статті висвітлено особливості експертних досліджень парфумерних товарів. Визначено основні методи досліджень відповідно до національних стандартів та міжнародних нормативних документів. Проаналізовано основні положення щодо оцінки якості, маркування та пакування парфумерних товарів з

метою оновлення методики проведення їх експертизи відповідно до сучасних вимог нормативної документації. Наведена порівняльна характеристика технічних вимог міжнародних стандартів до якості парфумерних товарів та технічних вимог національних стандартів. За результатами порівняння асортименту імпортованих та вітчизняних парфумерних товарів, встановлено, що основна різниця між ними полягає у вмісті парфумерної композиції та визначенні стійкості запаху парфумерії. Встановлено, що основними чинниками формування якості парфумерних товарів є вихідна сировина, кількісний і якісний склад виробу, особливості його виробництва (консистенція, характер упаковки, вид споживчої тари, місткість одиниці виробу). Проведено оцінку якості парфумерних товарів для виявлення їх відповідності сучасним нормативним документам за основними органолептичними та фізико-хімічними показниками якості, а також оцінку відповідності тари, в яку фасуються парфумерні рідини, маркування та пакування за методиками, які наведені в європейських нормативних документах. Авторами запропоновано алгоритм проведення основного етапу товарознавчої експертизи якості парфумерних товарів на відповідність сучасним вимогам міжнародних стандартів, регламентів, директив та нормативно-технічних вимог національних стандартів, що в подальших розробках може стати основою для сучасної методики експертизи парфумерних товарів.

**Ключові слова:** експертні дослідження; парфумерні товари; показники якості; технічні вимоги; маркування; міжнародні стандарти.

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## **ОСОБЕННОСТИ СОВРЕМЕННЫХ ЭКСПЕРТНЫХ ИССЛЕДОВАНИЙ ПАРФЮМЕРНЫХ ТОВАРОВ**

Захарчук, В. Г., Неруца, Л. В. Особенности современных экспертных исследований парфюмерных товаров // Вестник социально-экономических исследований : сб. науч. трудов (ISSN 2313-4569); под ред. : М. И. Зверякова (глав. ред.) и др. Одесса : Одесский национальный экономический университет. 2018. № 4 (68). С. 9–18.

**Аннотация.** В статье освещены особенности экспертных исследований парфюмерных товаров. Определены основные методы исследований в соответствии с национальными стандартами и международными нормативными документами. Проанализированы основные положения по оценке качества, маркировки и упаковки парфюмерных товаров с целью обновления методики проведения их экспертизы в соответствии с современными требованиями нормативной документации. Приведена сравнительная характеристика технических требований международных стандартов к качеству парфюмерных товаров и технических требований национальных стандартов. По результатам сравнения ассортимента импортных и отечественных парфюмерных товаров установлено, что основная разница между ними заключается в содержании парфюмерной композиции и определении стойкости запаха парфюмерии. Установлено, что основными факторами формирования качества парфюмерных товаров является исходное сырье, количественный и качественный состав изделия, особенности его производства (консистенция, характер упаковки, вид потребительской тары, емкость единицы изделия). Проведена оценка качества парфюмерных товаров для выявления их соответствия современным нормативным документам по основным органолептическим и физико-химическим показателям качества, а так же оценка соответствия тары, в которую фасуются парфюмерные жидкости, маркировки и упаковки по методикам, приведенным в европейских нормативных документах. Авторами предложен алгоритм проведения основного этапа товароведческой экспертизы качества парфюмерных товаров на соответствие современным требованиям международных стандартов, регламентов, директив и нормативно-технических требований национальных стандартов, что в дальнейших разработках может стать основой для современной методики экспертизы парфюмерных товаров.

**Ключевые слова:** экспертные исследования; парфюмерные товары; показатели качества; технические требования; маркировка; международные стандарты.

**JEL classification:** D180; F190; L150; L660

## **1. Introduction**

The perfume market in Ukraine is quite saturated, however, experts estimate its development as very promising. At the market of perfumery goods of Ukraine, the share of domestic products is very small. The state of the economy has significantly affected the industry. The reduction of own production of perfumery products has led to a sharp increase in the quantity of products of foreign origin in Ukraine. About 60% of perfumery products sold in Ukraine have nothing to do with the trademark shown on its packaging [1, p.254].

The value of perfumery products is growing in line with the increasing social standards of consumers, which are becoming more demanding in line with the development of market relations. However, the question of the quality of perfumery products is always relevant, since these products are in contact with human skin and directly affect the health of a person.

In connection with this, there is a need for conducting expert studies that are necessary to confirm the quality of imported perfumery products in accordance with national standards and international regulatory documents.

## **2. Aim and methodology of research**

There are many brand names, varieties of goods for every taste. Perfumery products are currently a rather promising group of goods. The Ukrainian market presents products of a large number of perfumery firms of France, Germany, England, Sweden, the USA and others. In a great variety of perfumery products it is easy to get confused, there is a chance to come across a fake or imitation of high-quality or elite perfumes.

Thus, there is a need for actual research in the area of examination of perfumery products, since such research results will play the role of a concrete basis for the development of a modern methodology for the examination of perfumery products.

The purpose of this article is to identify the features of expert research and analysis of the quality of perfumery products to identify their compliance with national standards and international regulatory documents.

## **3. Literature review, shortcomings and problem statement**

The problem of research of assortment and quality of perfumery products was studied by such scientists as follow: L. Peshuk, I. Demidov, I. Vasiliev, S. Vilkova, L. Yakovleva, G. Kutakova, O. Votchenikova, T. Pisarenko, A. Remiga, etc. The scientific work of these scientists is characterized by the thoroughness inherent in the development of the general theoretical plan.

The expert practice of the perfume industry requires a scientific systematization of the accumulated material, taking into account the new regulatory framework and economic conditions. With regard to regulatory documentation in the perfumery industry, this situation has developed – a part of the regulatory documents that has remained an inheritance since the Soviet Union was revised in connection with the new requirements of scientific and technological progress. As a result, in recent years, national standards have been adopted and enforced [2; 3; 4] and the following European regulations [5; 6; 7; 8; 9] have been introduced, which are directly related to the definition of quality and commodity-based examination of perfumery products.

## **4. The main material research**

At the market of perfumery goods of Ukraine, the share of domestic products is very small. The state of the economy has had a significant impact on this industry. Overseas perfumery takes leading positions both in quantity and in quality.

Perfumery products – alcohol, alcoholic or aqueous alcoholic solution of multicomponent mixtures of aromatic substances.

The main factors of forming the quality of perfumery products are raw material, quantitative and qualitative composition of the product, as well as features of its production (consistency, packaging nature, type of consumer packaging, capacity of product unit, etc.).

A perfume composition is created by a specialist-perfumer on the basis of his professional experience, taking into account his professional experience, taking into account the available developments of both his own and his colleagues. The most common way of creating compositions is the work of a group of specialists. Today in the world more than 5000 fragrances are used to create perfumes and flavors, not including their mixtures. To get the desired smell, the perfumer may use individual fragrances and essential oils, but may also combine the composition-base. They represent a harmonious combination of fragrances and are created to facilitate the work of the perfumer.

Ready-made base compositions are used when choosing the basis for a new smell or improving the existing one. At first, the perfume creates the main or leading smell. Then, to the main smell, pick up the individual fragrances that complement and harmoniously combine with the main smell, that is, the original, middle, end notes.

The initial note appears before and shortly after the evaporation of alcohol from perfume. It creates the first, spontaneous impression of perfume and does not matter decisively. It is composed of volatile components of the composition: citrus, herb, aldehydes, green, ozone fragrances.

The note of the «heart» of the perfume determines the type of smell. It unfolds after the initial note and holds for 10–12 hours. It uses less volatile aromatic substances: patchouli, vetiver, sandalwood oil and oak moss extract, absolute essences, crystalline fragrances (heliotropin, coumarin, artificial musk), resinous substances (benzoic acid, styrax) and animal products (natural amber, musk, beaver jet, etc.). At this time, all the main aromas of the composition are manifested: fruit, flower, spice, wood, animals, etc.

The final note is felt at the final stage of evaporation. At this stage there is no longer a full bouquet, but a pleasant smell of the remnant, often has little to do with the mid-odor, but harmonizes with it.

For perfumery, the main group of raw materials is the aromatic substances that are natural vegetable (essential oils, resins, balsams) and animal origin (products of the excretion of certain animal glands – musk, ambergris), as well as synthetic. A multicomponent mixture of fragrant substances (up to 100 and more) forms a perfume composition – the basis of a perfumery product, on which the nature of the smell depends, and its stability, that is, the main consumer properties of the perfume. The use of raw materials of animal origin gives the smell of a perfume a special shade – tenderness, unity, increases its duration (resistance). Synthetic fragrances make it possible to create perfumes and colognes with different fantasy odors that are not found in nature. The more fragrant substances in the perfumery composition of the product, the higher its quality. In perfumes of an extra class they should be not less than 300. The recipe for such a composition is a commercial secret and is known only to the developer. The composition of liquid perfume products includes alcohol (as a solvent of fragrant substances), water, and sometimes dyes. Their quantity and quality also determine the quality of the product and create an assortment [10, p.301].

Of great importance for perfumery is the packaging and the outer design of products. Packaging should not only promote the preservation of the quality of goods, but also be the external design, at the same time its advertising, the brand of the manufacturer and the indicator of quality, competitiveness, which depend on consumer demand and price of the product. Therefore, advanced firms pay great attention not only to finding a new fragrance perfume, but also to create a bottle, name, packaging. Over the years there are specialists in odors, designers, designers, even sculptors. There are whole schools of perfumer art.

The range of imported perfumes entering the Ukrainian market is classified as follows:

– perfumes (Parfum or Extrait), contain 20–30% perfumery composition, strength of alcohol not

less than 90%;

- perfumery water (Eau de Parfum or Parfum de Toilette, or Exprin de Parfum), composition of composition 15–20%, strength of alcohol not less than 90%;
- toilet waters (Eau de Toilette), composition of composition 6–12%, strength of alcohol not less than 85%;
- Cologne (Eau de Cologne) contains 3–5% perfumery composition, strength of alcohol 70–80%;
- fragrant water (L'Eau Fraoche, Eau de Sport), content of composition 1–3%, Alcohol strength 70–80% or less.

According to the content of perfumery composition (aromatic substances) and according to the purpose of DSTU 4710:2006 [2, p.4] are divided into concentrated perfumes (the content of fragrant substances is not less than 30%), perfumes (content of fragrant substances not less than 15%), perfumes-esprit (content flavoring substances not less than 10%), perfumery waters (content of aromatic substances not less than 8,0%), toilet waters (not less than 4,0%), cologne (not less than 1,5%), fragrant water (not less than 1,0%). Perfumes and toilet waters are used as a means of flavoring; colognes – as hygienic, refreshing and aromatic means; fragrant water – both refreshing and hygienic.

Perfumery products according to sensory, physical and chemical parameters must meet the requirements given in the Tab. 1 (according to DSTU 4710:2006).

Table 1

Sensory and physicochemical indices of perfumery products [2, pp.3–4]

Indicator	Characteristics and norm						
	Concentrated perfume	Perfume	Perfumes-Esprit	Perfumery water	Toilet waters	Eau de Cologne	Fragrant water
1	2	3	4	5	6	7	8
Appearance	Transparent liquid. The presence of single fibers is permissible						
Color	The inherent color specified in the technical requirements for a certain product of a perfume						
Scent	The inherent smell, set in the technical requirements for a perfume product of a certain name						
Persistence of smell, h., not less than	60	60	50	50	40	24	Not standardized
Transparency	Absence of turbidity at temperature, °C						
	+3	+3	+3	+3	+3	+5	+5
Volume fraction of ethanol,%, vol	55,0	70,0	75,0	75,0	75,0	60,0	20,0
Amount of bulk particles of fragrant substances,%, not less than	30,0	15,0	10,0	8,0	4,0	1,5	1,0

Expert evaluation – a set of operations for the choice of complex or unit characteristics of goods or other objects, to determine their actual values and confirmation by experts that they meet their established requirements and / or commodity information. In expert evaluation, the requirements for the characteristics of goods can be established not only by regulatory documents, but also by

experts. At the same time under the commodity information it is necessary to understand the summary, indicated on the marking, in commodity – accompanying documents or other sources of information (normative, technical documents, educational, scientific, reference literature).

Measurement, registration, sensory and calculation methods are used to find the values of the quality indices [2, p.3–6].

The conformity of perfumery products with the established sensory, physical and chemical indicators is determined by the following methods, which are given in the current normative documents.

The peculiarity of the examination of the quality of perfumery products is the simultaneous examination of the quality of perfumes and containers (tubes, jars, bottles, pens, etc.), in which the medium is packed. The concept of «perfume product» includes two components: content and packaging (individual).

Another feature is that the expert does not set a percentage reduction in the quality of the product, which has defects or lost (partly or entirely) the appearance. The acts of examination state the actual state of the product (container and contents), a description of defects is given. Products that have defects or lost the appearance of the expert attribute to poor quality. They are properly packaged, and the products are sealed with a personal stamp of an expert, which is an appropriate entry in the examination act.

The conformity of marking of consumer packaging with perfumery products is determined according to DSTU 5010:2008 Production of perfumery and cosmetics. Packaging, marking, transport and storage [4], Regulation (EC) No. 1223/2009 [6], “Guidelines for the Labeling of Cosmetic Products in the European Union” (Developed by COLIPA, December 2012) [5].

Marking can be applied to labels or directly to the body of the jar, box, pencil case, vial and package.

Marking for perfumery and cosmetics contains the following information:

- name of the goods, country and firm of the manufacturer, its trademark or trade mark;
- the legal address of the manufacturer;
- the description of the product and its bar code;
- designation of the normative document on which it is produced;
- information on compulsory certification and batch number;
- date of manufacture, expiration date;
- volume in ml;
- safety, environmental or other trademarks.

Information that describes a cosmetic product intended for consumers.

A designer label must be attached to a bottle of perfume indicating the name of the product on the front side and the manufacturer’s name, address and trademark, as well as the month and year of production, the retail price, the symbol of the applicable standard, and the name of the product group on the reverse side.

When perfume is sold in unlabeled bottles placed in carton cases all marking must be made on the carton case. On the paper adhesive tapes, which are affixed to the boxes, the name of the product and the number of the article should be indicated by the printing method or the stamp paint; the name of the enterprise of its location; number of items packed in boxes; date of manufacture, brigade number; the name of the product group; standard designation.

In the boxes of perfumery products, the name of the product and the article number must be indicated; the name of the manufacturer and its location or the name of the consignor; name of the consignee; the serial number of the box and the time of manufacture; number of articles per piece;

number of packer; standard designation. Boxes should have the following inscriptions: “Up”, “Do not throw!”, “Glass”.

The minimum expiration date is indicated using the words “Applicable to (month, year)” or “Validity period (months, years)”, with the indication of the place on the package, where this date is [4, p.5; 6].

The nominal volume of perfumery products is indicated at the time of packing. The volume of perfumery products in consumer containers of less than 5 ml and free samples is not mentioned.

The composition of perfumery products should begin with the title “Ingredients”. Ingredients with a mass fraction of less than 1% can be listed in any order after those ingredients with a mass fraction of more than 1%.

A mixture of fragrant substances can be mentioned as the only ingredient with the use of words: “aromatic composition”, “perfumery composition” without disclosing its composition.

Dyes can be listed in any order after other ingredients. The conformity of packaging of perfumery products is determined in accordance with DSTU 5010:2008 with such additions.

Consumer packaging of perfumery products may consist of an inner packaging – containers in which perfume liquids are packed, and the outer packaging is a product or case in which consumer containers are packaged with perfumery products or without external packaging. Permissible negative deviations in volume of perfumery products in consumer containers are set in the technical requirements for a perfumery of a certain name and make no more than 6%. Conformity with the appearance, color and smell of perfumery products are determined in accordance with DSTU 5009:2008 Perfumery and cosmetics. Rules of acceptance, sampling, methods of tests [3, pp.3–4].

Appearance of products that have a liquid consistency and packed in transparent bottles are determined by viewing the vials with liquid in daylight or in the light of an electric lamp after two or three times the top of the bottle.

The smell of liquid products is determined by the sensory method using a 10 \* 160 mm thick dense strip that is dipped by approximately 30 mm immersion in the analyze fluid.

The transparency of the perfume fluid is determined in accordance with DSTU 4710:2006, 11.7 [2, p.7]. The method is based on a visual assessment of the transparency of the perfume fluid in a well-lit room. In a test tube cylinder pour (10–20) cm<sup>3</sup> of perfume fluid. The tube is closed with a stopper, in which the thermometer is installed (the thermometer must be completely immersed in the investigated perfume fluid). The test tube with a perfume fluid is cooled to a temperature of 5°C, and during the test of colognes and fragrant waters is cooled to a temperature of 3°C. Then they are taken out of the cooled mixture, they shake and look through daylight or with the light of an electric lamp.

The odor stability of perfumery products is determined according to DSTU 4710:2006, paragraph 11.6 [2, p.6]. The method is based on the sensory assessment of odor. In a porcelain cup for evaporation pour (0,5–1,0) cm<sup>3</sup> of perfume fluid. In it wet a piece of dry, pre-washed in hot water without soap, bleached gauze in the size of 5 \* 10 cm, remove it with a tweezers and, without pressing, dried in the room at a temperature of 15–20°C. The odor stability of the perfume fluid is determined by the sensory method in the range of 12 hours.

## **5. Research results**

Sample 1. Montale Perfume Water. Consumer packaging consists of inner and outer packaging. The outer carton serves as a carton box. The inner packaging is an opaque aluminum bottle blocked by a spray gun.

The carton box, in which the bottle with a perfumery product is packed, is marked in three languages: Ukrainian, Russian and English. The box contains: name and type of product – perfume

water for women Montale (eau de parfum); the name of the country of origin – France; the name of the manufacturer – Montale C-L-D; Manufacturer's legal address – 68, Rue Pierre Charron, Paris, 75008; volume in ml – 100; list of components – denatured alcohol, demineralized water, odorous substances; term of use – suitable for 12.2020; caution: flammable; Do not spray near fire, hot items, heat source or working electrical appliances; Avoid contact with eyes and irritated skin. Take care of children; use only by appointment; the batch number of the goods; product barcode.

The perfume bottle contains: name and type of product – perfume water for women Montale (eau de parfum); the name of the country of origin – France; volume in ml – 100; Strength of alcohol in % – 80.

Sample 2. Eau de Toilette Franzesko Smalto Fullchoke. Franzesko Smalto Fullchoke's consumer packaging of toilet water consists of an inner and outer package. An outer packaging is a cardboard box. The inner packaging is a glass bottle enclosed with a spray valve.

The carton box, in which the bottle with a perfumery product is packed, is marked in three languages: Ukrainian, Russian and English. The box contains: name and type of product – Franzesko Smalto Fullchoke WC for women; name of the country of origin – United Kingdom; the name of the manufacturer – Francesco Smalto; The manufacturer's legal address is 08006 London England; trademark; volume in ml – 100; list of components – denatured alcohol, demineralized water, odorous substances; Usage period – Applicable to 10.2019; caution: flammable; Do not spray near fire, hot items, heat source or working electrical appliances; Avoid contact with eyes and irritated skin. Take care of children; the batch number of the goods; product barcode.

The perfume bottle contains: name and type of product – Franzesko Smalto Fullchoke WC for women; name of the country of origin – United Kingdom; volume in ml – 100; Strength of alcohol in % – 80.

Sample 3. The perfume of Salvador Dali for women. The consumer packaging of Salvador Dali for women is made up of inner and outer packaging. The carton box in the polyethylene film acts as an external packaging. The inner packaging is a glass bottle with atomizer.

The carton box, in which the bottle with a perfumery product is packed, is marked in three languages: Ukrainian, Russian and English. The box contains: name and type of product – spirits Salvador Dali for women; the name of the country of origin France; the name of the manufacturer – Confinluxe; trademark is present; volume in ml – 50; list of components – denatured alcohol, demineralized water, odorous substances; term of use – suitable for 12.2021; the batch number of the goods; product barcode. The perfume bottle contains: name and type of product – perfume Salvador Dali for women; volume in ml – 50.

Sample 4. Giorgio Armani Si Rose Signature Perfumery Water. The Giorgio Armani Si Rose Signature perfume water consumer packaging consists of an inner and outer package. The carton box in the polyethylene film acts as an external packaging. The inner packaging is a glass bottle with an atomizer.

The carton box, in which the bottle with a perfumery product is packed, is marked in three languages: Ukrainian, Russian and English. The box contains: name and type of product – Giorgio Armani Si Rose Signature (eau de parfum); the name of the country of origin – Italy; the name of the manufacturer – Giorgio Armani; trademark; volume in ml – 50; list of components – denatured alcohol, demineralized water, perfumery composition; the term of use – suitable to 02.2020; caution: flammable; Do not spray near fire, hot items, heat source or working electrical appliances; Avoid contact with eyes and irritated skin. Take care of children; the batch number of the goods; product barcode. The perfume bottle contains: name and type of product – perfumery water for women Giorgio Armani Si Rose Signature (eau de parfum); the name of the country of origin – Italy; volume in ml – 50; Strength of alcohol in % – 80.

Sample 5. Kenzo Perfume Water. The Kenzo perfume bath consumer packaging consists of an inner



and outer package. The carton box in the polyethylene film acts as an external packaging. The inner packaging is a glass bottle with an atomizer.

The carton box, in which the bottle with a perfumery product is packed, is marked in three languages: Ukrainian, Russian and English. The box contains: name and type of product – perfume water for women Kenzo (eau de parfum); the name of the country of origin – France; the name of the manufacturer – Kenzo; the legal address of the manufacturer is Paris France; trademark; volume in ml – 50; list of components – alcohol denaturation, demineralized water, perfumery composition; term of use – suitable for 11.2020; caution: flammable; Do not spray near fire, hot items, heat source or working electrical appliances; Avoid contact with eyes and irritated skin. Take care of children; the batch number of the goods; product barcode. The perfume bottle contains: name and type of product – perfume water for women Kenzo (eau de parfum); the name of the country of origin is France; volume in ml – 50; Alcohol strength % – 80.

Based on the analysis of marking and packaging of perfumery products, we can conclude that all the samples submitted meet the requirements of DSTU 5010: 2008 [4] and the requirements of European regulations [5; 6; 7].

The results of the research of samples of perfumery products on the main indicators of quality: appearance and color, transparency, smell, odor resistance is presented in Tab. 2.

Table 2

Basic quality indices of perfumery products (developed by the authors on the basis of [2, p.3–4])

Indicator	Characteristic				
	Perfumery water Montale	Toilet waters Francesko Smalto Fullchoke	Perfume Salvador Dali for women	Perfumery water Giorgio Armani Si Rose Signature	Perfumery water Kenzo
Appearance and color	Transparent liquid	Transparent liquid	Transparent liquid	Transparent liquid	Transparent liquid
Transparency	Absence of turbidity at temperature, ° C				
	+3	+3	+3	+3	+3
Scent	Floral, saturated, warm	Flower-fruity, light	Flower, with muscat hues, full	Flower-fruity, light	Flower- citrus, light
Persistence of smell, h.	79	55,0	88,0	80,0	85,0

After analyzing Tab. 2, we can conclude that according to the main indicators: appearance and color, transparency, smell, smell resistance, the samples tested meet all the requirements of DSTU 5009: 2008 and DSTU 4710: 2006. According to international requirements, odor resistance is determined somewhat differently, as the time for full perception of heart note.

## 6. Conclusions

Based on the analysis of marking and packaging of perfumery products, during conducting expert studies, we can conclude that all the samples submitted meet the requirements of domestic and international regulations.

According to the main indicators of quality: appearance and color, transparency, smell, odor stability, the samples meet all the requirements of regulatory documents DSTU 5009:2008 and DSTU 4710:2006.

Prospects for further research in this area are the formation of the basis of the results of studies on the level of quality of perfumery products during the examination of the quality of perfumery products in the light of Regulation (EU) No. 1223/2009, Guidelines for the marking of cosmetic products in the European Union. The results of the research of perfumery products will play the role of a concrete basis for the development of a modern methodology for the examination of perfumery products.

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